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# THE RHODE ISLAND MEDICAL JOURNAL



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## CONTENTS

### ORIGINAL ARTICLES

- Determination of Activity of the Pathological Process; the  
Keynote in Treatment and Prognosis in Syphilis of the  
Central Nervous System. James B. Ayer, M.D. . . . 239  
Pulmonary Abscess and Gangrene. Halsey De Wolf, M.D. . . . 243

### EDITORIALS

- The Income Tax . . . . . 250  
Treatment of Our Disabled Soldiers . . . . . 251  
The Medical Profession after the War . . . . . 252  
Standardization of Military Medicine . . . . . 253  
Fees . . . . . 253

### SOCIETIES

- Rhode Island Medical Society . . . . . 253  
Providence Medical Association . . . . . 254

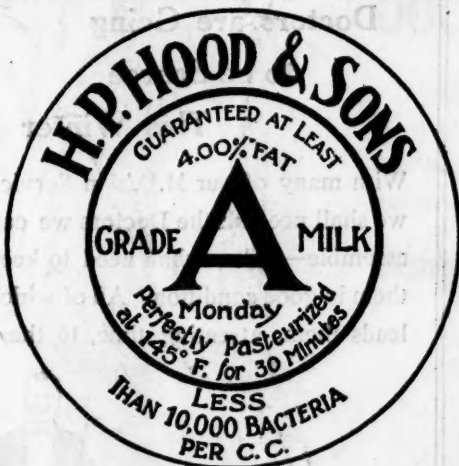
### HOSPITALS

- Rhode Island Hospital . . . . . 254  
St. Joseph's Hospital . . . . . 254  
Providence City Hospital . . . . . 254

### MISCELLANEOUS

- Necrology . . . . . 247  
Navy Base Hospital No. 4 . . . . . 249  
Honor Roll . . . . . 249

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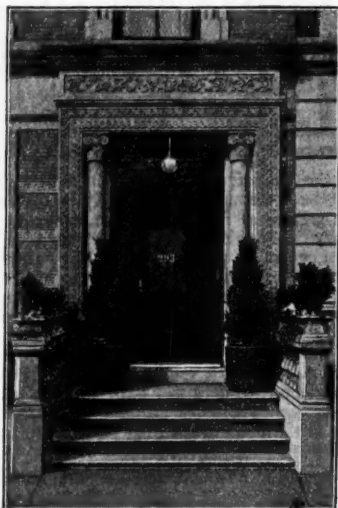
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Perils of the Drug Habit.

Federal Responsibility in the Solution of the Habit-Forming Drug Problem: for Information of Congress, and Others.

The Drug Taker and the Physician.

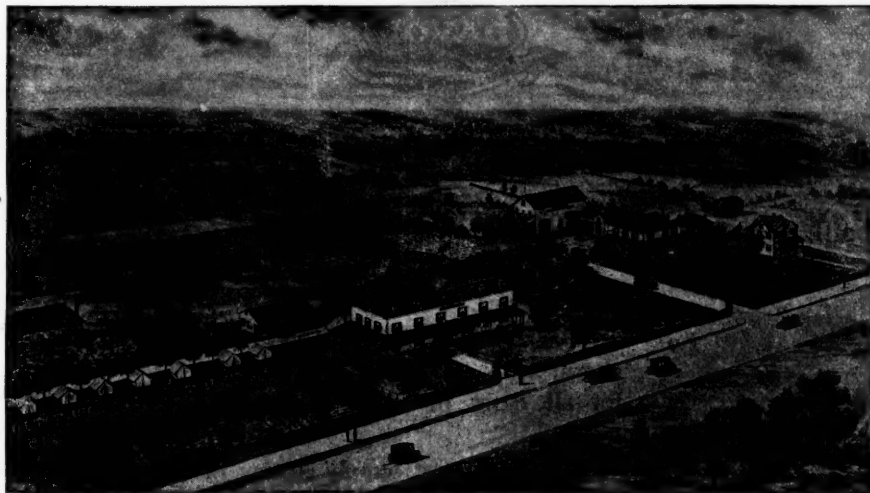
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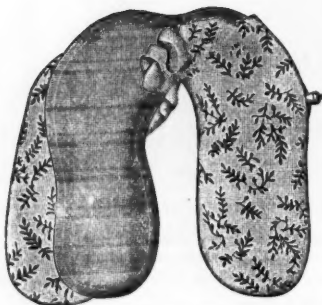
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# THE RHODE ISLAND MEDICAL JOURNAL

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## ORIGINAL ARTICLES

### DETERMINATION OF ACTIVITY OF THE PATHOLOGICAL PROCESS; THE KEYNOTE IN TREATMENT AND PROGNOSIS IN SYPHILIS OF THE CENTRAL NERVOUS SYSTEM.\*

By JAMES B. AYER, M. D.,  
Boston, Mass.

INTRODUCTION: Syphilis of the nervous system is a large subject. Consideration of it fills many pages of every text-book on nervous diseases, and its victims form the largest single group in many nerve clinics. One-twelfth of all new cases coming to the Nerve Room of the Massachusetts General Hospital during the past year were suffering from syphilis of the central nervous system. In any obscure disease of the nervous system, syphilis must always be considered.

Therefore it is with humility that I offer a paper on a subject so extensive, only attempting to set forth the guiding principles of treatment and prognosis as well as personal knowledge dictates. My interest, primarily aroused by the advent of salvarsan therapy in 1911, has, I hope, not blinded me to a broader consideration of therapy in this disease group. While this drug and its equivalents are unquestionably of the greatest benefit in some cases and indispensable in others, it has never been my opinion that it solved all difficulties, nor do I wish now to convey the impression that "treatment" is synonymous with "salvarsan therapy."

IMPORTANCE OF FINER DIAGNOSIS: As in any disease the finer the diagnosis the more accurate the prognosis and the more effective the treatment. One does not say this "patient has a gastric ulcer; he must have medicine," or "he must have surgery;" which form of treatment he receives depends upon the age of the lesion, its position, and whether or not it obstructs,

together with the general condition and age of the patient. One no longer says this patient has "pulmonary tuberculosis," but adds the all-significant word "incipient" or "late stage," thereby connoting a good or bad prognosis.

Just so we must learn not to diagnosticate simply "cerebrospinal syphilis," but qualify as "progressive," "inactive," "early" and "late." We should not order salvarsanized serum for every patient who has tabes, neither make too good nor too poor a prognosis the moment the diagnosis of syphilis of the nervous system is made.

But have we knowledge enough to determine the type presented and make a prognosis of any real value? In many cases—about two-thirds—we have.

DETERMINATION OF TYPE AND ACTIVITY OF THE PATHOLOGICAL PROCESS depends largely upon the interpretation of three factors—(1) the onset and progress of symptoms, (2) the signs on examination, and (3) the laboratory tests. Intelligent correlation of these should suffice in most cases to determine prognosis and lead to efficient treatment.

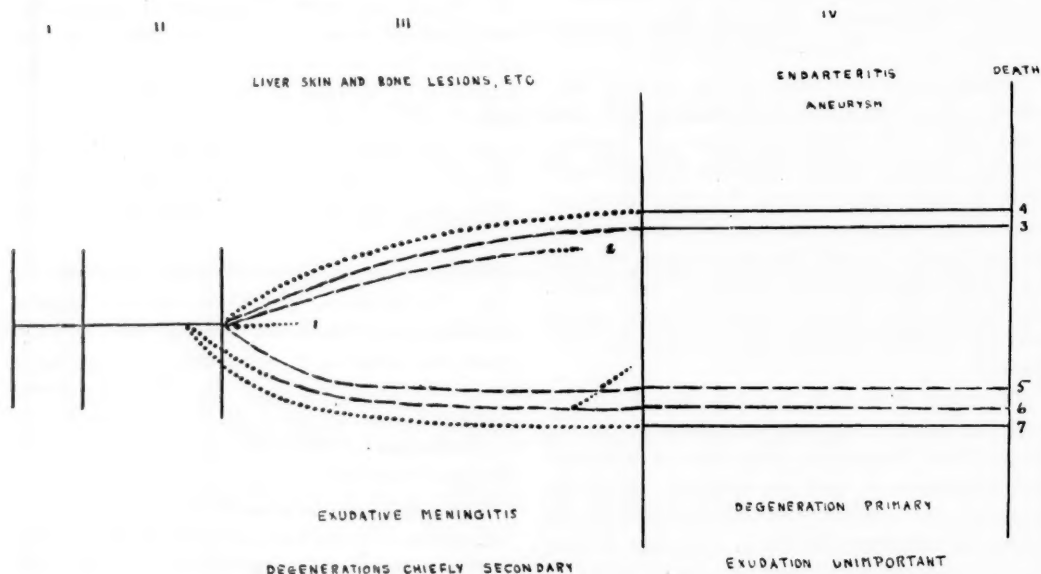
THE ONSET OF SYMPTOMS is very important. Symptoms of syphilitic affection of the nervous system commencing within two years of the primary lesion are, it is fair to say, always manifestations of meningeal involvement (or of vascular disease if we admit this as syphilis of the nervous system); the symptoms, usually intense, drive the patient early to the physician; if recognized and intensive treatment instituted, the outcome is bright, in some cases brilliant. For example, Mr. A. C. a few months following a chancre suffers from severe headache and is rapidly losing his sight; with treatment the former is immediately relieved; the latter returns to normal in a few weeks. Now take a patient who is much less acutely ill; he has for months suspected that his sight was failing and has finally consulted an oculist who refers him to a neurologist; his primary lesion dates back ten

\*Read before the Providence Medical Association, Nov. 5, 1917

years. Twenty times as much treatment as in the former case will do well if it succeeds in holding the sight where it is. In the first case we are dealing with an optic neuritis, an inflammatory meningitis; in the second, with a progressive atrophic process. Both are syphilitic in origin. The prognosis in one is good for return of function and for cure; in the other, poor for both.

How do the tests help us here? They confirm our suspicions; in the meningeal case we found many lymphocytes—120 per c.mm.; in the latter a few only. The Wassermann reaction was positive in both.

ALL SYMPTOMS AND SIGNS MUST BE ELICITED for the thorough understanding of a given case. Suppose two patients commence to have symptoms of nerve involvement, both many years after contracting the disease; both go to the doctor because of unsteadiness in walking. On examination one presents only a Romberg and absent knee—and Achilles—jerks; the other shows the same on superficial inspection, but the careful observer sees also an awkwardness in the use of the hands; he also notices a crack in the voice; moreover, this patient is emaciated due, as he says, to frequent attacks of indigestion; on questioning he also admits that he has



#### EXPLANATION OF DIAGRAM

I, II, III, and IV represent stages of syphilitic infection, varying lengths of time, especially III and IV which may each be many years. The upper lines represent vascular and somatic infection other than that of the nervous system.

As shown in (1) the infection may cease soon after the secondary period, with no late manifestations. In (2) it may cease after some tertiary lesions, usually intermittent in character.

In (3) we find intermittent lesions for a number of years, followed by permanent changes. In (4) the disease is not evident throughout a long period, and years afterward we have the late symptoms and signs of the disease (e. g. endarteritis, aneurysm).

The lower lines represent involvement of the nervous system.

In (5) we have various brain and cord syphilis—meningeal in type, intermittently active, which may become inactive after a number of years or continue indefinitely.

In (6) the nervous system is **not obviously** affected for a number of months or years and then lesions become manifest which may or may not continue till death. (5) and (6) are composed of the group usually called "cerebro-spinal syphilis."

In (7) the involvement of the nervous system is latent for many years and then symptoms develop based chiefly on a degenerative pathology (e. g. tabes and general paresis).

Chief importance is attached to (4), (6) and (7) formally unrecognized, now suspected by examination of blood and spinal fluid **at their inception**. Adequate treatment applied at this time should make for better prognosis in these cases.

at times great difficulty in breathing, sometimes being awakened from sleep in a dyspnoeic attack. He says that for some time also he has been dizzy, and examination reveals an impairment of hearing; his eyesight has not bothered him, but the examiner finds faulty vision and one or both discs distinctly pale.

Both patients have tabes, to be sure, and both consult the doctor for unsteadiness of gait, but when the veil is lifted on these two five years later, the former still walks and looks the same or better; the latter is dead or worse, although having the greater amount of treatment.

THE IMPORTANCE OF LABORATORY TESTS is nowhere better illustrated than in the following patients: Mr. X. came to the hospital in 1912, a tremulous, forgetful man, who was promptly by all who saw him set down as suffering from general paresis. Under rather mild anti-syphilitic treatment (he has never had salvarsan or serum) he is now—five years later—a useful citizen.

Miss N. R. presented a most agreeable appearance, her symptoms being of a psychoneurotic character, and it was hard for her (and almost for me also) to persist in treatment simply because she had had a maniacal outbreak of short duration. She ran the course of general paresis and was dead within two years. What were the tests? In the man blood Wassermann was positive, the spinal fluid being in all respects negative. In the woman, blood and spinal fluid Wassermann strongly positive, cells +, proteids markedly increased, and goldsol. showing the paretic curve.

There is nothing in laboratory work in neurological cases that seems to work out more strikingly than the findings in paresis. When tests are reported like the young woman's just given, always give a guarded prognosis, never mind how well the patient appears!

In all of the cases, actual and supposed, above considered, the tests, either blood or fluid, have been positive. All of them may be considered to have an active pathological process and all require anti-syphilitic treatment of one kind or other.

Let us now examine the very considerable group of patients who undoubtedly have cerebro-spinal syphilis as shown in history and examination, but in whom the tests are negative. My case reports fall into three groups:

(1) Cases thoroughly treated medically, in whom tests have changed from known positive to negative.

(2) Long-standing cases (usually old in years as well as from point of view of disease) which are found to have negative tests.

(3) Abortive cases without treatment.

The first and second groups may be classed together as artificially arrested cases—arrested in different stages of progress of the disease. The difficulty in maintaining such a thesis lies in the fact that some of these "arrested" cases show the greatest ravages of the disease, the type being the old tabetic who gets about with the use of a cane, leading a catheter life and with changes of weather going to bed with a bad attack of pain. While it cannot be argued that such a patient has not tabes, I believe from an analysis of a considerable number of such cases it can be said that *the disease process does not progress*, that the symptoms of which such a patient complains are referable to the neurones already destroyed. In this respect the disease is arrested; the condition may be compared to a patient with a contracting scar from a burn; it causes limitations of action and at times pains and aches, but the symptoms are referable to the portion affected and *do not involve new unattacked areas*. We may then get such widely different disease symptoms as ataxia, pain, cystitis and Charcot joint in the arrested case, but we do not expect to find any of these symptoms manifesting themselves in newly invaded areas; they persist or appear in areas already degenerated. It is in differentiating progressive from non-progressive cases that our laboratory tests are of great value.

The third group to which mention was made is a small one, but worthy of citation because of the hopefulness it instills. I have records of a number of cases in whom there is every reason to suppose a true syphilis of the central nervous system commenced and became spontaneously arrested. Take, for example, Mrs. W., a woman of 45, who was examined at her request because her husband was found to be paretic. She complained of nothing, but examination revealed Argyll-Robertson pupils and one absent Achilles jerk. Her tests were negative. On going into her history it seems that ten years ago she was subject to rheumatic pains, but had taken no medicine therefor. Since then there had been no symptomatic progression of the disease.

The more we study the various manifestations of syphilis of the central nervous system, the more types we find, so that our classification becomes clinically most complex. What we want is a working basis for prognosis and for treatment. This we are able to obtain in the great majority of cases by a careful correlation of clinical and laboratory findings which determines the *extent and activity of the pathological process*.

TREATMENT should be based then upon this fundamental conception of activity and non-activity of the pathological process. If a case be active and progressive, the pathological process must be stopped, and anti-syphilitic medication is the logical means to this end. If inactive and non-progressive, the treatment should be symptomatic.

Let us take first the treatment of active progressive cases of cerebrospinal syphilis. Granting that anti-syphilitic medication is indicated, what kind of medicine and what doses shall be given? It seems to me that the basic unit of treatment is the course of four to six injections of intravenous salvarsan (for the adult 0.3 to 0.4 gm. each) given at intervals of about a week and repeated at four months' interval. This is the form of treatment upon which most cases are first placed and by which alone many cases are arrested. Such treatment will usually suffice in the acute meningitic forms following in the first year or two after the primary lesion; it will also suffice in many cases of tabes and the cerebral syphilitics in whom the process is largely meningitic. There are cases in which mercury is even more valuable than salvarsan, but they are few in number, and the good effects are not likely to be so lasting. I usually do give a course of mercury, preferably inunctions, during the period of the salvarsan course, but am not convinced that it enhances the value of the salvarsan in most cases.

After two courses of such treatment it is well to put the patient through a complete examination, again including the laboratory tests. If, as is usually the case in tabetics, all goes well, symptoms being alleviated, no new symptoms appearing and tests greatly improved, it is wise to persist in the same type of treatment until the desired symptomatic and laboratory arrest are obtained. But if the progress of the disease is

still unchecked, then it is advisable to put the patient upon serum injections, the original Swift-Ellis technique being the type. In some cases more will be accomplished by this than by intravenous therapy. But in some even these serum injections into the spinal canal will be found insufficient, particularly in the optic atrophies and in paresis. In the treatment of these resistant cerebral types it is reasonable to place the curative serum in the cranial cavity, and to accomplish this end we have three different methods, (1) through a trephine opening, placing the serum under the dura, (2) puncture of the lateral ventricle, and (3) placing the serum in the spinal canal and forcing it to the brain by means of saline administered under considerable pressure over a considerable period of time (30 minutes +). By these means we at times derive benefit after failing with the intravenous technique.

Why is it not best to place all patients immediately upon a combined intravenous and serum regime? There are several reasons—the serum injections are apt to be severe in after effects—especially in tabetics—and therefore enervating; they cause a loss of time to the wage earner which the simpler injections should not; they have at times caused paralysis of the bladder when correctly carried out, and death when carelessly performed. Moreover, they must be more expensive, and, most important, they often are not necessary. I do not criticize the physician who gives serum injections to every active case; I do question the wisdom of administering serum before trying the simpler and less drastic treatment first.

Many variations in dosage, in frequency of injections must be made to suit the individual case. The above outline gives the treatment of active progressive cases as understood by me, in so far as an attempt is made to bring about arrest of the pathological process. Subsidiary treatment, hydrotherapeutic, re-educational, orthopaedic and medicinal, finds a place during and between courses in almost every patient, not minimizing the importance also of psychotherapy which is most necessary in chronic cases such as these.

When shall treatment be stopped? This is a most difficult question. My feeling is that many cases are overtreated. If we attain the desired result—no symptoms and negative tests—we all

agree. But in our attempt to attain perfection we must not go to extremes. We must remember that neurones destroyed cannot be replaced no matter how much medicine is given; we must remember that a positive Wassermann reaction does not bother the patient except as the idea is conveyed to the unfortunate by the physician, and that it is often better to keep a patient in fair usable health than to reduce him in weight, in courage and in pocketbook with the hope that he may subsequently rise to perpetual happiness—he may not rebound. My maxim here is, be satisfied with improvement, even if slight; a little gain each month makes considerable gain in a year. In my experience there is no such thing as *magna sterilans* from any form of treatment in syphilis of the central nervous system.

This leads us to the consideration of *treatment of the inactive cases*. These need no anti-syphilitic medication, the process being already at a standstill. They do require careful study of their individual needs. First in importance stands re-education for the tabetic. Whole books have been written on the subject, and the importance of re-education can hardly be over-emphasized. Apparatus for hyperextension of the knee-joints, proper shoes and arch supports are at times invaluable in the late-stage tabetic. Regulation of the amount of exercise and massage play a part in conserving and augmenting the poor power of the degenerative case. Abdominal supports and back braces help weak trunk muscles. Bladder training and urotropine should be employed in the prevention of cystitis. There seems no way of preventing the appearance of Charcot joints, but orthopaedic apparatus may be wisely employed once they appear.

Medicine here is employed on a symptomatic basis; tonics are used with much benefit, analgesics must be employed for pain and cathartics used with great judgment. The treatment of the late degenerative stage of nerve syphilis is difficult and often unsatisfactory, but requires rare good judgment. The prevention of morphinism is not the least important service which can be performed by a physician to such a patient.

In conclusion I wish to restate what I consider the keynote of rational treatment of syphilis of the central nervous system, namely, determination by clinical and laboratory means of the activity of the pathological process and therapy administered upon this basis.

## PULMONARY ABSCESS AND GANGRENE.\*

By HALSEY DE WOLF, M. D.,  
Providence, R. I.

Pulmonary abscess and gangrene have, of late years, become of special interest through the work of the modern surgeon, who now dares to approach the lung in an operative way as never before, and with constantly improving results. Of all diseases hovering upon the border line which separates surgery and internal medicine, perhaps none more truly than these under discussion involve both these branches of the healing art.

It is well to define clearly what is meant by pulmonary abscess and pulmonary gangrene, and to state that clinically and even pathologically it is often impossible to differentiate between the two. Pulmonary abscess is an accumulation of one or more pockets of pus in the lung tissue or parenchyma—not primarily in the bronchi, pleura or interlobular tissues—although these tissues are so frequently complicated in the process that a hard, fast line of definition cannot be drawn. Pulmonary gangrene, to quote Forchheimer, is "distinguished by death in mass of pulmonary tissue, leading to the formation of sequestra, and usually also by an associated putrefactive decomposition which gives a peculiarly disgusting odor to the sputum and breath of the patient," and he goes on to say: "Indeed, those who have had the greatest clinical experience with these conditions, such as Friedrich, Quincke, Körte, Lenharts and Keisling, have shown a tendency to drop the distinction on account of the difficulty of classifying border line cases."

For our purpose we may treat abscess and gangrene as practically the same disease, and for convenience consider the subject under the term "abscess."

The history of lung abscess and its surgery dates back to the time of Hippocrates, who is reported to have opened a lung abscess. To quote in part from I. J. Walker of Boston: "Schenk in 1584 and Pitman in 1696 recommended operative treatment in pulmonary abscess. . . . In 1664 Baglini opened a lung abscess, resulting from a sabre thrust, but it was

\*Read before the Memorial Hospital Staff Association, September 25, 1917

not until the eighteenth century that the thorax was approached in a scientific manner by Dr. Barry in 1776 and later by Sharke. In 1864 Koenig wrote upon the subject. In 1873 Mosler, struck by the poor success of the conservative method of evacuating pus, was the first to inaugurate an active procedure in certain cases of lung infection." Since that time more and more careful and yet radical work has been done, and in very recent years with greater and greater success as to results.

That abscess of the lung is a comparatively rare disease, the following figures may be presented to show:

In 2,500 autopsies at the Montreal General Hospital there were nine cases of gangrene and eighteen of abscess.

In 1,620 autopsies at the Middlesex Hospital, London, seven cases of lung gangrene.

In the records of eighteen years at the Boston City Hospital thirty-six cases of abscess and gangrene were reported.

In 1,400 autopsies at the Massachusetts General Hospital thirty-eight cases of gangrene and abscess are reported.

In 200 autopsies at the Rhode Island Hospital six cases showed lung abscess.

In looking over the Rhode Island Hospital records from 1897 to 1914, a period of seventeen years, I find on the medical service but fifteen cases of abscess and on the surgical only seven cases, of which latter five are recorded since 1911. Of the cases reported by the surgical service, apparently one was operated in 1903 and one in 1914, surely not a record of which either internist or surgeon can be proud. That many cases of lung abscess occurred at the Rhode Island Hospital in these seventeen years, either undiagnosed or unreported, there can be no doubt, which fact but emphasizes the more clearly that the coming years will bring us much work to do in seeking out, working up and treating properly these cases of disease.

The causes of abscess of the lung are varied and occur either within the lung itself, or without, in structures adjacent in the chest or more remotely in the abdomen. The first, those within the lung, are lobar and broncho-pneumonia, influenza, putrid bronchitis, infected embolism, foreign bodies or substances inhaled into the bronchi (as after throat and nose operations) and tuberculosis. The type of abscess following

tuberculosis is not, however, strictly speaking, the one here under discussion. The tubercular abscess is more truly a series of abscesses, small, discrete, slow in development, occurring as the result of infection and breaking down of tubercular nodes—is found usually in the apices of the lungs and is not susceptible of operative treatment. Among the rarer causes of lung abscess may be mentioned syphilis, new growths of the lung and echinococcus disease.

Lobar pneumonia is by far the commonest, while broncho-pneumonia is no doubt frequently a cause of the abscess. Influenza is believed by Lord to be less prominent in the etiology than has been supposed. Pulmonary embolism, secondary to an infective process elsewhere in the body, such as septic endocarditis, abdominal operations with infection, may give rise to abscess, with or without the presence of a secondary pneumonia. Inhalation of foreign bodies may occur in many ways, as after throat and nose operations, with secondary lung infection. Teeth swallowed and drawn into a bronchus during anaesthesia, pus from ruptured peritonsillar abscess or diphtheria; food stuffs inhaled while choking, and water taken into the lungs in submersion may all act as causes of pulmonary abscess.

Of the causes arising without the lung, the most common are empyema, subphrenic abscess, gall bladder and appendiceal infection with abscess formation, broken down mediastinal growths or glands and caries of the spine—finally trauma, as penetrating wounds or even crushing accidents in which the resistance of lung tissue is lessened and secondary infection supervenes. Various organisms may be isolated in these abscesses—pneumococcus, strepto and staphalococcus, colon and influenza bacilli and other less common forms; the infection is always of mixed variety.

The type of abscess with which we are dealing in a given case is of vast importance, especially as influencing treatment. It is possible to speak of the acute and chronic form, of single and multiple, of the deep and superficial. Differentiation between acute and chronic would seem to be more or less arbitrary. It is reasonable, I think, to speak of the abscess as acute where it has occurred in the course of or followed immediately upon a pneumonia; when it can be assumed that there is yet no induration or fibrous

tissue about the abscess wall; when it is emptying freely into the bronchus and showing signs of improvement, and by evacuating itself, of eventual cure; when finally it has probably lasted less than a month and is yet conceivably curable by medical means, though active in its manifestations.

Conversely, the abscess is chronic which has existed for several weeks, and declared itself insiduously, with slight evidence of sepsis; with a dry, annoying cough unproductive of sputum; few physical signs and these indefinite; with final rupture into a bronchus and expectoration of foul pus. Here purulent localization of considerable extent may have occurred, with possible induration about the cavity; putrid discharge and symptoms continue to a fairly constant degree, and there is small hope of spontaneous cure. Or, again, the diagnosis may have been made early and the case allowed to run on for a considerable period in the hope of cure without surgical interference. This favorable result, as a matter of fact, occasionally happens, even after many months of suppuration and discharge.

The single or multiple foci are important, if possible to distinguish. The single abscess, or, strictly speaking, the abscess confined to one lobe, follows oftener probably upon croupous pneumonia and embolism, while the multiple type occurs with broncho-pneumonia. More important and more constant is the fact that acute abscess is single and chronic abscess multiple. In this lies one of the greatest dangers of allowing the lesion to exist until it becomes chronic, as the multiple abscess is often inoperable.

The converse of this last statement holds true, however, as regards the depth of the suppurative area, i. e., the more chronic it is the more superficial will it lie and so the more favorable will it be for operative procedure and subsequent drainage. The acute abscess usually begins deep in the lung, and as it becomes chronic tends to progress towards the periphery of the organ. The most common site of the lesion is the lower lobes, especially the right. The site also varies somewhat with the cause. Intrapulmonary causes, as the pneumonias, aspiration of foreign bodies, etc., lead to deep seated abscess; and external causes, as wounds, or extension from neighboring organs fix the abscess at the periphery of the lung.

The pleura must play an important part in a consideration of this subject, since its condition is of vital importance in any operative procedure. If the abscess is secondary to pneumonia, a pleurisy will probably exist; and again if the cause of the abscess is external to the lung, pleurisy will precede or accompany the abscess formation. If, however, the abscess is due to aspiration or embolus, the pleura may be sound. Tuffier reports that 87 per cent. of his cases of abscess showed complicating pleurisy. This phase of the subject will be referred to later.

The diagnosis of lung abscess is usually not a difficult matter, especially when we are familiar with the causes that produce it. A pneumonia, in which crisis has occurred with normal temperature for a few days and is followed by signs of sepsis; a pulmonary embolus followed by the same signs; an empyema draining favorably and freely, with sudden onset of septic symptoms; a liver abscess or high purulent appendix with abdominal drainage established, followed by pulmonary symptoms and sepsis, all suggest the presence of lung abscess, although the fact may not be considered proven, perhaps, until there occurs expectoration of the foul, putrid pus. The final and conclusive proof of true abscess is presented when the putrid pus contains elastic tissue, which represents a destruction of the lung and bespeaks a gangrenous process.

Differential diagnosis from tuberculosis, bronchiectasis and empyema belongs more to the text book than to the province of this paper.

Physical signs of lung abscess are often misleading and frequently quite negative. In the acute abscess the underlying condition, as a pneumonia, infarcted area, empyema, etc., will mask, in its signs, any direct evidence of the presence of abscess, while in the subacute or chronic abscess, physical signs may be slight or altogether absent, particularly if the abscess lies deep in the lung. Here a few moist rales, a partial suppression of the breath sounds, rarely an area of impaired resonance or broncho-vesicular breathing; none of these sharply defined or expressed, will be all that suggests the lesion.

X-ray examination is of vast importance as an aid to diagnosis, not so much of the existence of abscess as of its location. The shadow is often faint and not clearly defined and may be indefinite in outline, especially in chronic cases; on the other hand, it may be very dark and sharp

in the acute cases with large accumulation of pus. An effort should be made to take the picture some time after the pus has been evacuated in the hope that more pus has formed with a resultant full cavity. Areas of collapsed or infarcted lung, or of pneumonia, overlying empyema and other existing lesions may confuse the picture. Both anterior, posterior and lateral views should be taken in these cases. No interpretation of the location of the abscess should be attempted by other than an expert roentgenologist. Finally, the X-ray has not infrequently cleared up another point than the location of the abscess, i. e., its etiology, by demonstrating the presence of a foreign body in the lung, as a tack, tooth, pin or coin.

The prognosis of lung abscess varies somewhat with its etiology. Following lobar pneumonia it is better than after broncho-pneumonia. In chronic cases with multiple foci, not connecting with a bronchus, it is more serious than in those which are acute, single and freely drained. The condition and resistance of the patient are important factors. Many small acute abscesses undoubtedly heal spontaneously and quickly—one such I saw last fall—after free evacuation of the pus. Many others drain continuously for months or even several years without apparently any tendency to spread to adjacent portions of the lung. Still another class of cases will drain for a long period through the bronchus and yet finally heal. The result of such spontaneous cures is probably indurated or scar tissue at the site of the abscess.

The surgical mortality, as recorded by Garré, for a series of 182 cases of abscess was 18.5 per cent.; in 281 cases of gangrene 29.3 per cent. died. The operative results are better in cases drained early, i. e., with two to four weeks, than in those drained late, i. e., after eight or nine months.

Treatment of pulmonary abscess must be considered from both the medical and surgical aspect, and so, as already stated, demands the most thoughtful consideration of both physician and surgeon and especially that they work together to the common end.

The medical treatment of acute abscess is limited to possible preventive measures, to sustaining efforts and to methods whereby the most effective drainage may be established. Drugs, antiseptic inhalation and vaccines have been tried,

but with results so negative that they are for the most part discarded by those of experience in this disease. Artificial pneumothorax has been successful in a few cases. Prophylaxis of pulmonary abscess is limited to care in the avoidance of aspiration of foreign bodies or materials during anaesthesia, sleep, or other conditions in which consciousness is lost. For this reason general anesthesia should be avoided in such operations as incision of a peritonsillar or post-pharyngeal abscess, and the extraction of carious teeth with complicating pus pockets. Foreign bodies known or suspected to be lodged in the bronchi, should be localized by the bronchoscope or X-ray and if possible removed. Empyema if neglected may lead to lung abscess, and should be opened early for this as well as other reasons. In cases of old, putrid bronchitis or of bronchiectasis, the patient should be urged to clear out the air passages regularly and as completely as possible by coughing while in a position favoring drainage. Should abscess of one lung already exist, the patient must be urged to lie on the affected side, that drainage of pus into the healthy lung area may be avoided. Supporting and open air treatment, with good hygiene, must be carried out as in any case of sepsis.

The question of when and how to operate in these cases is of prime importance. Acute cases get well and even chronic cases may, after long periods, heal spontaneously, as has been said. Operation is always serious and sometimes fatal from complicating hemorrhages, collapse of the lung and pyopneumothorax; while drainage is liable to be long continued and exhausting.

However, reference to the recent literature as well as a consideration of modern surgery as we see it about us, points to a lower mortality in cases of abscess where surgical rather than medical measures have been used. It seems to be well established that the acute cases should be allowed a period, roughly speaking, of from two to four weeks to heal spontaneously, before considering surgical interference. Such cases may, however, present symptoms so serious that an earlier resort to surgery must be had. The X-ray must be used early and often if necessary; physical signs must be carefully studied and compared; the patient's general condition must be closely watched; and, when all is done, the decision for or against operation is liable to be most difficult. With single abscess, clearly defined,

near the surface and not draining well, the outlook with operation is good. Multiple abscess or abscess in both lungs are usually contraindications; also deep seated abscess, which may be difficult to find and which must be evacuated through a considerable depth of normal lung tissue.

Operation, when decided upon, must be carried out only after careful study and a most serious effort exactly to localize the lesion. Here the X-ray, as has been said, probably aids us most. Exploratory puncture through the chest wall is not to be done, since, if the pleura is uninvolved and free, a secondary empyema may result. The condition of the pleura should be known if possible, as upon this largely depends the method of operation. Should the pleura be free, the operation must be done in two stages, five days to a week apart. Should there be a plastic pleurisy or empyema present, or should the acuteness of the symptoms demand immediate release of the pus, the operation must be done at one sitting.

To describe the procedure briefly: A broad, elliptical incision is made down to the ribs; portions of two or three, as required, are resected and the pleura exposed. If this is normal and evidently free from the underlying lung and if time permits, a gauze packing is placed against the pleura, and the greater portion of the skin flap is sutured back into place, leaving an opening for the gauze pack. Five to seven days later the whole wound is again laid bare, the gauze removed and the pleura found probably in a condition of inflammation, with adhesions between visceral and parietal layers. A circular row of catgut sutures is now placed through lung and pleura, to further wall off the free pleural cavity, and including the supposed area of the abscess cavity, which may now be opened after preliminary exploration with the needle. The pus evacuated, a drainage tube is inserted into the abscess cavity and gauze drains placed down to the pleura, the skin wound being closed in to the drainage points.

Should pleurisy with adhesions already exist, practically the same procedure is followed, but at one sitting.

General anaesthesia must generally be used, though theoretically local anaesthesia is advisable, largely on account of the danger of aspiration of pus into the sound lung in the former method.

Ether or chloroform have been frequently employed, the former with an arrangement for forced air pressure in case of lung collapse. Gas oxygen I saw very successfully employed with an apparatus for forcing the oxygen into the lung.

Though much that is of importance on this subject has necessarily been omitted, it is hoped that sufficient has been said to arouse the interest of those who are, for the most part, practicing internal medicine, and especially of those in general practice, whom I would urge to watch closely, during the coming winter, for those signs which suggest abscess of the lung, and which should, not infrequently, lead to early surgical consultation before operative relief is too late.

### NECROLOGY

DR. HENRY W. BURNETT, widely known as specialist in children's diseases, died at his home, 167 Lloyd avenue, May 7, 1917. Dr. Burnett was born in New York City in 1873. He graduated from Long Island College Hospital and later attended King's County Hospital and Harvard Graduate School of Medicine.

He served as resident physician in Butler Hospital, physician in charge of children's diseases at the Rhode Island Hospital, the North End Dispensary and the St. Vincent de Paul Infant Asylum.

Dr. Burnett was a member of the Board of Managers of the Providence District Nursing Association, Chairman of Baby Welfare Committee, Rhode Island Medical Society, Providence Medical Association, American Medical Association, Association of Military Surgeons and New England Pediatric Society.

He was formerly Captain in the Medical Corps, Rhode Island National Guard, and was recently appointed Assistant Surgeon General of this State. He leaves a widow, mother, two brothers and two children.

DR. ALBERT E. HAM, for many years prominent in the medical fraternity and a Civil War veteran, died at The Minden January 24, 1917, after several weeks' illness. He was born in this city July 23, 1843; graduated from Brown University and College of Physicians and Surgeons in New York.

After a year of study in Paris, he commenced to practice in this city. He was house physician, surgeon, pathologist and librarian, also visiting

and consulting physician and surgeon at various times for the Rhode Island Hospital; consulting physician and surgeon at St. Mary's Orphanage and the Providence Dispensary.

In 1862 he enlisted for three months in Company D, Tenth Regiment, Rhode Island Volunteers, and since 1876 had been examining surgeon for pensions.

Dr. Ham was at one time President of the Providence Medical Association, a member of the Rhode Island Medical Society, the Rhode Island Hospital Club, the American Academy of Medicine and the American Medical Association.

He leaves a daughter, a son and two sisters.

DR. DAN O. KING of Auburn died April 8, 1917. He was born in Stillwater, R. I., December 15, 1850, a member of an old Rhode Island family many of whom had followed the medical profession.

He graduated from Bowdoin College in 1875 and began the practice of medicine in Pontiac, R. I. All of his practice had been in Cranston and Warwick, serving as Medical Examiner and Superintendent of Health in Warwick, and was a member of the House of Representatives from that town in 1878, and as a member of Town Council and town physician in the town of Cranston.

Dr. King was something of a traveler, having visited Mexico, Alaska and Europe. In medical matters he was a great student. He made a study of the disease of rabies and administered the Pasteur treatment to the first patient to receive it in this city.

DR. ADRIAN MATHEWS, for forty years a practicing physician in this city, died at his home, 131 Ocean street, November 19, 1916.

Dr. Mathews was born in Pennsylvania, graduated from Bucknell University and taught several terms in the public schools of his home county. He received a degree from Jefferson Medical College in 1874 and was the same year appointed interne in the Rhode Island Hospital. For many years he was visiting physician of the Gorham Manufacturing Company.

He was a member of the Rhode Island Medical Society, American Medical Association, Central Baptist Church and St. John's Lodge of Masons.

Dr. Mathews had been abroad several times and had traveled much in the United States. He was well acquainted with the historical and

geographical features of New England and its industrial development.

He leaves a widow and two daughters and three brothers, also physicians.

DR. JOHN E. O'NEIL died at his home, 399 Prairie avenue, on December 7, 1916, after an illness of four days. He leaves a widow and five children, two brothers, William H. and Dr. M. J. O'Neil of this city, and four sisters.

Dr. O'Neil was the first interne of St. Joseph's Hospital and maintained his connection with the hospital until his death. He was a member of the Providence Medical Association, Rhode Island Medical Society, American Medical Association and many of the Catholic Clubs.

He was born in Worcester in 1867 and received his degree of M. D. from the University of New York. He had been a practitioner in South Providence for twenty-three years.

DR. GEORGE D. RAMSEY of Newport died November 27, 1916, after a long illness. He was born in New York, May 28, 1869; graduated from the University of Virginia and Tulane University in New Orleans, in which city he practiced until 1899, when he became Major in the medical department of the United States Army for the Spanish-American War.

Coming to Newport as civilian surgeon at Fort Adams, he soon became active in the affairs of the city. He was a trustee of the State Institution for the Deaf and a member of numerous medical societies, of the Medical Reserve Corps of the United States Army and of the Army and Navy Club of Washington.

In accordance with his will, the body was cremated and the ashes laid in Arlington Cemetery, Washington.

DR. EDWARD F. WALKER, Superintendent of the Providence Lying-In Hospital for three years, died at the hospital December 12, 1916, from heart trouble.

He was born February 4, 1846, in New York City; graduated from College of Physicians and Surgeons, Columbia, in 1876, and commenced to practice in this city three years later, continuing until his death, having been connected with the Lying-In Hospital for thirty years.

Dr. Walker was a member of the Rhode Island Medical Society, the Central Congregational Church and also a Mason.

DR. HARRY VERNON WEAVER died in New Bedford, Mass., September 21, 1917, of peritonitis. He graduated from Boston University in 1893. In 1898 he joined the Rhode Island Medical Society from Carolina, R. I. He moved from the State in 1901.

Dr. Weaver was a specialist of the eye, ear, nose and throat.

DR. EDWARD STARK PARKER died in Pawtucket, R. I., February 18, 1917. He was born in Derby Line, Vt., May 23, 1874.

In 1896 he received the degree of B. A. and his medical degree from Harvard in 1900. He married Miss Agnes Wightman of Pawtucket in 1903.

Dr. Parker joined the Rhode Island Medical Society in 1904.

DR. PHILIP K. TAYLOR was born in Kingston, R. I., in 1860 and died August 22, 1917, in Brooklyn, N. Y.

Dr. Taylor graduated from the University of Pennsylvania in 1882; joined the Rhode Island Medical Society in 1883, and was a fellow of the American Medical Association. He moved to New York in 1910.

He was for eight years Sergeant of Ward Steamship Line and Sergeant of the steamship Monterey. He was taken ill on this steamship and on its arrival was taken to the Brooklyn Hospital, where he died the same night.

DR. JOSEPH F. LINDSEY, JR., a past fellow of the Rhode Island Medical Society, died September 8, 1917, at Roxbury, Mass., of angina pectoris. He was born in Fall River, Mass., October 4, 1849.

Dr. Lindsey was interne at the Rhode Island Hospital in 1876. He settled in Newport and later in Boston, Mass., where he was a member of the Boston and Massachusetts Homeopathic Medical Society. He became a fellow of the Rhode Island Medical Society in 1877. He retired from practice about thirty years ago.

#### HONOR ROLL.

The following Rhode Island physicians have recently accepted commissions in the Medical Reserve Corps, U. S. A., or in the United States Naval Reserve Force, in addition to the names already published:

Lieut. (Junior Grade) William P. Buffum, Jr., U. S. N. R. F.

Lieut. Norman B. Cole, M. R. C., U. S. A.

Lieut. (Junior Grade) Paul Cooke, U. S. N. R. F.

Lieut. (Junior Grade) George A. Eckert, U. S. N. R. F.

Lieut. (Junior Grade) Henry L. Johnson, U. S. N. R. F.

Lieut. (Junior Grade) Frank H. Mathews, U. S. N. R. F.

Lieut. Joseph E. Raia, M. R. C., U. S. A.

Lieut. (Junior Grade) Elihu S. Wing, U. S. N. R. F.

Lieut. (Senior Grade) Clinton S. Westcott, U. S. N. R. F.

#### NAVY BASE HOSPITAL NO. 4.

This unit was recruited in Providence last spring at the request of the Navy Department upon receipt of an offer from the Trustees of the Rhode Island Hospital to establish such a base hospital. The work of organizing and completing the personnel and equipment has been stupendous, but has proceeded quietly during the summer and fall. The unit was originally planned as a 250-bed hospital, and the medical and nursing staffs were selected with that number in mind. In September word was received from Washington to enlarge the unit to a 500 bed hospital. Consequently eight more physicians and about twenty more nurses have been added to the staff, together with a few extra men in the enlisted personnel. These additions have been secured, with the exception of forty hospital apprentices, who will be supplied from the enlisted men in the Navy. The equipment is practically complete and is stored in several large rooms in the basement of the Rhode Island Hospital. Three motor ambulances form a part of the equipment and have been donated by generous friends. One of these ambulances is now on exhibition in the windows of a motor agency in Providence. Lieutenant Commander George A. Matteson, U. S. N. R. F., director of the unit, was ordered on an active status over six weeks ago. Uniforms have recently been obtained by members of the unit, and personal equipment is being secured. For the past six weeks a course of instruction for hospital apprentices has been given at the Rhode Island Hospital on Saturday afternoons. The course has included instruction in dressings, bandaging, care and handling of patients, and demonstrations of laboratory work, X-ray work, drugs, and brief talks by the staff. Two members of the staff have taken special courses preparatory to active service. Dr. Roland Hammond attended the School for Instruction in Military Roentgenology, which was established by the War Department last July at the Cornell Medical College, New York. Dr. Alex. M. Burgess has attended a similar school for instruction in laboratory methods at the Rockefeller Institute under Dr. Simon Flexner.

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ROLAND HAMMOND, M.D., *Editor*  
249 Thayer Street, Providence, R. I.

J. F. HAWKINS, M.D.  
*Business Manager*  
114 Westminster Street  
Providence, R. I.

ALEX M. BURGESS, M.D.  
JOHN E. DONLEY, M.D.  
J. W. LEECH, M.D.  
F. T. ROGERS, M.D.

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### DISTRICT SOCIETIES

KENT  
Meets the second Thursday in each month  
C. L. PHILLIPS *President* East Greenwich  
L. J. A. LEGRIS *Secretary* Phenix

NEWPORT  
Meets the third Thursday in each month  
H. J. KNAPP *President* Newport  
M. E. BALDWIN *Secretary* Newport

PAWTUCKET  
Meets the third Thursday in each month excepting  
July and August  
CHARLES H. HOLT *President* Pawtucket  
EARL J. MATHEWSON *Secretary* Pawtucket

PROVIDENCE  
Meets the first Monday in each month excepting  
July, August and September  
FRANK E. BURDICK *President* Providence  
CHARLES O. COOKE *Secretary* Providence

WASHINGTON  
Meets the second Thursday in January, April,  
July and October  
F. C. PAGAN *President* Westerly  
W. A. HILLARD *Secretary* Westerly

WOONSOCKET  
Meets the second Thursday in each month excepting  
July and August  
W. W. BROWNE *President* Woonsocket  
E. F. HAMLIN *Secretary* Slatersville

**Section on Surgery**—2d Wednesday in each month, Dr. F. G. Phillips, Chairman; Dr. Peter P. Chase, Secretary and Treasurer.  
**Section on Diseases of Children**—3d Tuesday in each month, Dr. Henry E. Utter, Chairman; Dr. J. S. Kelley, Secretary and Treasurer.

**Section on Gynecology and Obstetrics**—3d Wednesday in each month, Dr. C. W. Higgins, Chairman; Dr. E. S. Brackett, Secretary and Treasurer.

**Section on Medicine**—4th Tuesday in each month, Dr. D. Frank Gray, Chairman; Dr. C. W. Skelton, Secretary and Treasurer.

**R. I. Ophthalmological and Otological Society**—2d Thursday—October, December, February, April and Annual at call of President, Dr. Lewis B. Porter President; Dr. H. C. Messinger, Secretary.

## EDITORIALS

### THE INCOME TAX.

Fortunately or unfortunately, depending upon the point of view, the income tax has not been a great burden upon the medical profession. At present, owing to the exigencies of the war, and aided by the democratic South, whose animosity toward Northern thrift and prosperity has found a vent in forcing upon the profession of the North a tax which affects comparatively few in the South, we are called upon to pay a large and unfair tax upon professional incomes. A tax assessor in an adjoining town was asked why he

saddled such a large and unexpected valuation of property on a citizen of the town, and he replied, "we needed the money and he had it." So we will all have to pay an income tax, all contribute toward the war expenses, in a measure show our patriotism by so doing even if we donate our lives or our children to the country's service, and this we do without cavil or regret. This is our country, and unless it is our country in the future, we will have little use for money.

The war revenue act of 1917 is difficult to understand and its present meaning may not be its meaning after the new Congress gets together, but it is not necessary to hire a lawyer to make

out your returns. We will assume that there is a physician who has an income of \$15,000 a year; of course "there aint no such animal," but it is a convenient sum to work on, and further that he owns a bit of real estate which is taxed for \$10,000, but which is disfigured by a mortgage of \$5,000. He is afflicted by a debt of \$3,000 and blessed by having three children of dependent age. He lives in his own house, but hires an office elsewhere and is further handicapped by an office assistant who acts as a stenographer, and a chauffeur who drives his automobile. This year he was obliged to buy a new car and traded his old one. Such a physician in making out his income tax returns will proceed as follows:

Total income .....	\$15,000.00
Under the Act of September, 1916, there will be deductions:	
Office rent .....	\$600.00
Office expenses .....	400.00
Stenographer .....	520.00
Chauffeur .....	780.00
Expense of auto .....	500.00
	2,800.00
Debts charged off .....	500.00
Gifts to war charities .....	300.00
Gifts to other charities .....	200.00
	1,000.00
Taxes .....	185.00
Interest on mortgage .....	300.00
Interest on indebtedness .....	180.00
Depreciation of real estate.....	250.00
Cost of new auto, less value of old one .....	1,200.00
	2,115.00
	\$5,915.00
Exemption .....	4,000.00
Net income taxable under Act of 1916 .....	\$5,080.00
2% .....	101.60
Under the new law trouble begins. The exemption is but \$2,000 and there are additions and additions.	
Deductions noted before .....	\$5,195.00
Three dependent children .....	600.00
	\$5,795.00
Exemption .....	2,000.00
	\$7,795.00
Taxable income .....	\$7,205.00
2% war tax, 1917 .....	144.10
1% tax excess \$5,000 to \$7,500 .....	72.05
8% excess profit over \$6,000 .....	96.40
	\$312.55
Tax under 1917 .....	
Tax under 1916 .....	101.60
Total tax .....	\$414.15

Verb. Sap.

## THE TREATMENT OF OUR DISABLED SOLDIERS.

The problems which will confront the medical profession when our injured soldiers begin to be returned from the front will be many and serious. We shall have few precedents to guide us and the kind of experience gained in civil practice will serve as a point of departure only for the new things that we will have to learn and to do. It is not, then, too soon to bestir ourselves and to inquire seriously as to our equipment to supply these demands. Are we going to be ready to do our bit in the way of offering the best medical service, or are we to provide something less good. We admit, of course, that the highest type of service is what we all desire to render to our maimed soldiers. It ought to be abundantly clear to everyone that despite the protestations of some now discredited prophets a nation cannot produce a real army overnight; and even so, the medical profession cannot render adequate service in an entirely unprecedented situation unless it has been previously organized and equipped with the tools to do so. In this country we shall probably be asked to care for men who will be suffering from the after-effects of casualties received at the front. Our job will be to restore what we can of functional capacity and efficiency. As in Europe, so here, we will find that if we are to achieve a fair measure of success an enlargement of our therapeutic armamentarium will be necessary.

For those deprived of sight, education of various sorts must be provided if their lives are to be made in the least endurable; for others suffering from the myriad forms of nervous disease something must be done; for yet others whose disabilities come within the purview of orthopaedics some practical helps should be available. And when we come to ask where these helps are to be found the answer is that in some manner and degree they are to be found in manual training, in electrotherapy, in hydrotherapy, in massage and in those other measures generically comprised under the heading of physical therapeutics.

In this country there has not been, as yet, the general recognition of the value as well as of the limitations of physical therapeutics that has obtained in Europe. Our interest, if indeed we had any, has been of the dilettante sort, and we have left the field relatively free, for the most

part, to be exploited by charlatans and quacks whose audacity is only a little less than their ignorance. And yet, by a lucky hit, they sometimes produce results where we have failed. Our inactivity is their gain.

It is an excellent lesson in intellectual humility to ask ourselves some questions that we should be able to answer; for upon our answers will depend much good or ill to our patients. Can we, for example, describe with some precision the various external uses of hot and cold water? What are the indications and what the contraindications for its employment? What the technique of its application? When is the commonly prescribed cold bath helpful and when is it harmful? What results are we to look for from hot water of different temperatures? and so forth.

When we were in the medical school we were perhaps (we say "perhaps" advisedly) shown a dilapidated galvanic and faradic machine which most likely was out of order, and we gained our notions of electrotherapy from that, foolishly concluding that there is "nothing in it." Or possibly, if we are recent graduates we are of opinion that electrotherapy is simply the futile rubbing of a so-called violet ray vacuum tube up and down the back of some highly suggestible patient. And so indeed it is, if that is the extent of our knowledge of the complicated subjects of electrophysics and electro-physiology. But, nevertheless, a large body of valuable information has been collected in this department by scientific men the world over, and this information the medical men of Europe have been using during the last three years to the great comfort and advantage of their soldiers.

What we have said of electrotherapy and hydrotherapy is true also of massage. It was the matured judgment of the late S. Weir Mitchell that it is possible to do quite as much harm as good by massage. A valuable aid in some conditions, it is worse than useless, because harmful, in others. But is it not true that with a general lack of attention to detail we too often leave the whole affair literally in the hands of the masseur? We order massage and there's an end of the matter, not because we are careless, but because in our student days we received little instruction in the use of this valuable therapeutic manoeuvre. Therefore the osteopaths pick the fruit from our trees. We remember to have

listened with great pleasure for one whole hour to an eminent professor's description of the delirium produced by Indian hemp, but we cannot recall having been instructed at all in the practical application of effleurage or pétrissage, their uses and abuses. Here, certainly, is a failure in somebody's sense of proportion. And so we are led to think that within another year, unless happily all signs fail, many of us will be asked to prescribe and to direct the employment of these physical measures more often than has been our custom in the past. In hospitals especially their need will be felt, and is it too much to hope that something may be done to anticipate a need that may become pressing in the not distant future?

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#### THE MEDICAL PROFESSION AFTER THE WAR.

It is not too early to speculate upon the changes which will inevitably be brought about in the medical profession as a result of the war. The science of medicine as well as the science of war has advanced by leaps and bounds during the past three years, and this progress will continue unabated until the dawn of peace. On returning to civil practice the general practitioner will inevitably find his family practice more or less disorganized, no matter how carefully his colleagues have guarded his interests during his absence. Even though well established in practice at the beginning of the war, he will find it more or less a case of starting over again. The case of the specialist is no better, if as well. During his absence the profession has fallen into the way of calling one of his confreres and in many cases will continue to employ the other man in consultation. In addition, the exigencies of war are demanding more and more the services of specialists, and hundreds of young men are being trained in our medical centres and cantonments for service abroad later with the augmented army. At the conclusion of peace these men will establish themselves in numbers throughout the country, probably in excess of the normal demands of their communities for specialists. This will tend to a splitting up of practice and a smaller opportunity for each man. On the other hand, the returning military surgeon will find himself much better fitted for the practice of any branch of medical science

than before his service. No one can actively engage, no matter in what capacity, in a war which touches the foundation stones of civilization, without acquiring a broader grasp of the fundamental problems of life and of human nature as a result of his experience. His professional knowledge also will be much larger. No matter what his line of practice, he will be better fitted to take his place again in the ranks of the profession. While naturally the major part of the work will be the surgery of gunshot wounds and accidents, there will be found a large percentage of the diseases and conditions of civil practice. Just as a better France and Belgium will emerge from the ruins of those devastated countries, so will a better trained medical profession with better opportunities emerge from the present disorganized conditions of practice. If he is awake to his advantages, the opportunity will be with him who has served.

#### THE STANDARDIZATION OF MILITARY MEDICINE.

In bringing the personnel and equipment of the Army and Navy up to specified standards the authorities have not failed to include the training of specially qualified men recently recruited from civil life. This standardization of training in specialized lines of work is directly comparable to the development of the famous "Liberty motor." In both cases the patriotic, coöperative and tireless efforts of experts has resulted in an achievement hardly possible in time of peace.

As in the case of the "Liberty motor" the needs of the situation have been clearly demonstrated by the experiences of the Allied armies and by conditions arising in the early months of mobilization of the American army. The "Liberty motor" represents but one phase of the general improvement and standardization of Army and Navy equipment. The general improvement in medical service has, in the same way, numerous phases. These include the development of new methods in prevention, diagnosis and treatment of disease and injuries, the standardization and simplification of these methods, and the systematic and intensive instruction of the officers who will apply them.

Examples of this sort of instruction are the work in war roentgenology now being carried on in various cities, and the instruction in the

"Carrel-Dakin" technique given by Dr. Carrel at the Rockefeller Institute. Another, is the course in intensive laboratory training held at the Rockefeller Institute, in which the newest methods used in the study and control of certain of the more important infections are taught to medical officers of the Army and Navy. Stimulated by the necessity of combating in our forces the disastrous effects of infectious diseases, especially cerebro-spinal meningitis and lobar pneumonia, the staff of the Institute under the leadership of Dr. Flexner have so improved, simplified and standardized the methods of study, diagnosis and treatment that the general application of these methods will result in a very marked decrease in the ravages of these diseases among the troops. The importance of this work can hardly be overestimated.

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#### FEES.

Some time ago we called attention in these columns to the fact that nearly everything had advanced except medical fees. Rising prices of medical and surgical supplies, as well as the higher cost of living, have laid a heavy burden on the doctor. In addition, the present taxes are designed particularly to gouge the professional man. While we believe that the medical profession desires patriotically to bear its burden, we know that there is a limit, and we see but one way out. To raise the fee table, calls for united action on the part of the entire profession, and it is high time that our societies gave this matter their attention.

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### SOCIETIES

#### RHODE ISLAND MEDICAL SOCIETY. SECTION IN MEDICINE.

The annual meeting of the "Section in Medicine" was held October 23, 1917, at the Medical Library. The following officers were elected: Dr. D. Frank Gray, Chairman; Dr. Creighton W. Skelton, Secretary-Treasurer. The paper of the evening was read by Dr. Frank T. Fulton, on "Some Remarks on Functional Tests in Nephritis." A vote of thanks was extended to the retiring Chairman, Dr. Crooker. These meetings are very interesting and it is urged that the members attend this section.

CREIGHTON W. SKELTON, M. D.,  
Secretary-Treasurer.

## DISTRICT SOCIETIES.

## PROVIDENCE MEDICAL ASSOCIATION.

November 5, 1917.

The regular monthly meeting of the Providence Medical Association was held at the Medical Library on November 5, 1917. The meeting was called to order by the President, Dr. F. E. Burdick, at 9:03 p. m. There were present at the meeting seventy members and five guests. The records of the preceding meeting were read and approved. On motion of Dr. George S. Mathews, seconded by Dr. J. E. Mowry, it was voted that the usual appropriation of \$175 be made for the reading room. On motion of Dr. W. A. Risk, duly seconded, it was voted that the sum of \$300 be appropriated to the Rhode Island Medical Society for the use of the Medical Library for the year 1917.

The paper of the evening, entitled "The Treatment and Prognosis of Syphilis of the Nervous System," was read by Dr. James B. Ayer of Boston, Mass.

The discussion was opened by Dr. Charles A. McDonald, who advocated small doses of salvarsan and questioned the logic of intraspinal treatment. The discussion was continued by Dr. Farnell, who reported briefly the end result of intraspinal treatment of tabes at Butler Hospital. Dr. Donley said that every patient has his own syphilis, and stated that the blood and spinal fluid should be examined before discharging a patient as free from syphilis. Dr. Bernstein stated that many cases without signs or symptoms show a four plus Wasserman reaction. These cases may be symptomless, but they are not free from pathology. Dr. McCann reported a case of tabes in which a single injection of 0.3 gram of diarsenol was followed by acute delirium and subsequent death some two months later. Dr. Kerney reported a case of diabetes insipidus due to cerebrospinal syphilis. Dr. Sundin reported a case of syphilis which was receiving heroic doses of mercury and potassium iodide. Dr. Kimball advocated the use of small doses of salvarsan. The discussion was closed by Dr. Ayer. A rising vote of thanks was given to Dr. Ayer for his interesting and valuable paper. The meeting adjourned at 10:50 p. m. A collation was served.

CHARLES O. COOKE, Sec'y.

## WASHINGTON COUNTY MEDICAL SOCIETY.

At the quarterly meeting of the Washington

County Medical Society, held at the Colonial Club, Westerly, Thursday, October 18, 1917, a very interesting account of his experiences in France was given by Dr. Henry B. Potter, of Wakefield.

The death of Philip K. Taylor, M. D., of Brooklyn, N. Y., was noted as having occurred August 21, 1917. Dr. Taylor has been a member of this Society for many years, having joined during his active practice in Wickford. Drs. H. K. Gardiner and R. R. Robinson were appointed a committee to draw up suitable resolutions of respect to be forwarded to his widow and spread upon our records.

Lunch followed adjournment.

W. A. HILLARD, Secretary.

## HOSPITALS

## RHODE ISLAND HOSPITAL.

The annual meeting of the Rhode Island Hospital Corporation was held Wednesday, November 14, 1917, at 12:00 noon.

The annual meeting of the Staff Association will be held at the hospital December 10, 1917.

The annual examinations for internes will be held at the hospital December 8, 1917.

Dr. Norman B. Cole has received his commission as Lieutenant, M. R. C., and has been ordered to Washington, D. C., to take up special tuberculosis work at the Walter Reed Hospital.

Dr. Benjamin Tefft, Jr., has been appointed externe to the Medical Out-Patient Department.

Drs. Walter Street and Nat Copenhaver commenced their internship October, 1917.

Miss Grace S. McIntyre is stationed at Newport Naval Training Station for a few weeks, taking special work in preparation for her duties as chief nurse of the Naval Base Hospital Unit No. 4.

Dr. Alex M. Burgess is doing special laboratory work at the Rockefeller Institute, New York, in preparation for duty with Navy Base Hospital No. 4.

## ST. JOSEPH'S HOSPITAL.

Dr. John H. Morrissey has been appointed gynecological externe to the Out-Patient Department.

Regular meeting of the Staff Association was held at the hospital, November 9, 1917. Dr. Frank E. Peckham read a paper: "Some New Work in Orthopedics."

## PROVIDENCE CITY HOSPITAL.

Dr. R. Stolworthy has been appointed visiting dentist.

Dr. Henry B. Moor has been appointed assistant physician to the Pediatric Out-Patient Department.

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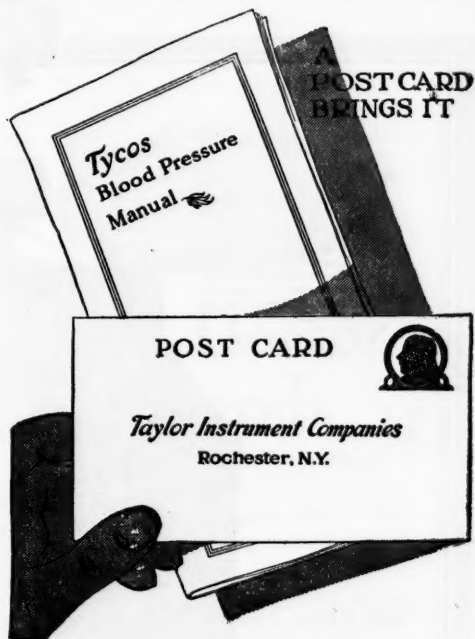
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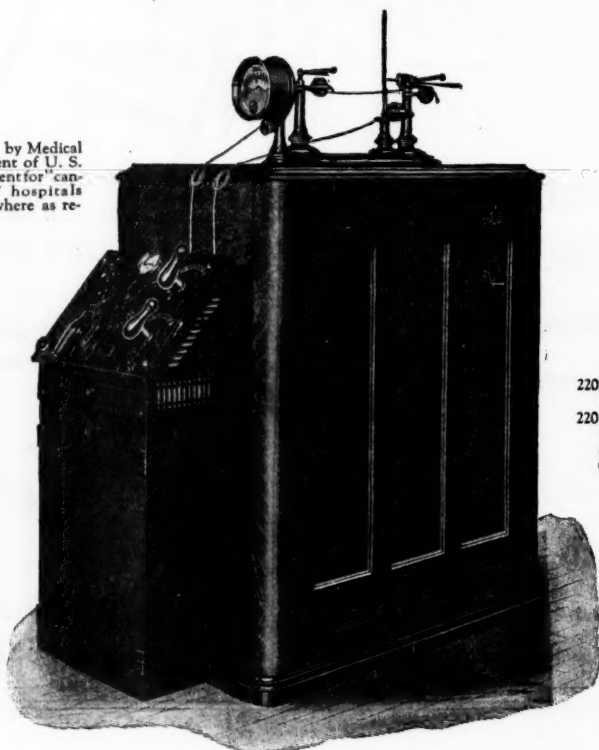
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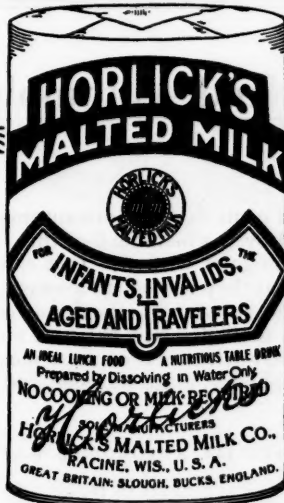
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